



File Code: 3410 (NA-04-20)

Date: July 29, 2004

Subject: 2004 Hemlock Woolly Adelgid Survey Results

To: Kevin Elliott, Forest Supervisor
Allegheny National Forest

During late May and early June of this year, Kevin Wiltsie, Mike Williams, and Tom Hebda of the Allegheny National Forest conducted a survey of 92 hemlock stands throughout the Allegheny National Forest. We are glad to report that no hemlock woolly adelgid was found in any of the stands sampled. The accompanying map and table provides general information and the locations of the sampled stands.

The hemlock woolly adelgid, *Adelges tsugae* (HWA), was introduced into the Eastern United States from Asia in the early 1950s near Richmond, Virginia. The adelgid was present on some exotic tree species that a private collector planted in his arboretum. The distribution of the HWA remained localized for the next decade. Since the 1960s the population has spread throughout the Northeastern United States. In 2003, HWA was reported in Clinton and Centre Counties approximately 40 miles from the Allegheny National Forest. The impact of HWA on the host species, eastern hemlock (*Tsuga canadensis*), is severe. Significant tree mortality usually occurs within 4 to 7 years after infestation. This insect pest not only threatens the hemlock resource but also the unique ecosystem it helps to comprise.

This sampling plan was created using Allegheny National Forest stand data. Only stands defined as "hemlock" were selected and a subset of those stands with road or trail access was surveyed.

The purpose of this survey was:

- To detect if HWA was present on the Allegheny National Forest.
- To provide a minimum detection threshold whereby HWA can be detected with 75 percent reliability in hemlock stands where at least 2 percent of the trees are infested.
- To make an efficient determination of the percentage of trees infested within a stand at the 0.25 precision level.

Even though HWA has not yet been found on the forest, it is important that field-going personnel continue to monitor for evidence of HWA in their areas and report this information to the Morgantown Field Office. As part of our continuing monitoring efforts, we plan to revisit a subset of this year's sites that have the highest likelihood of becoming infested. These areas will include campgrounds, trailheads, and other highly visited areas.



I personally would also like to extend my appreciation to Kevin, Mike, and Tom for their valuable assistance in this survey. If you or any of your staff have any questions or comments regarding this survey, please contact Richard Turcotte at (304) 285-1544.

Sincerely,

JOHN W. HAZEL
Field Representative
Morgantown Field Office

Cc: District Ranger, Bradford RD
District Ranger, Marienville/Ridgeway RD
Bob White, Forest Silviculturist

RMT/AKS

Table 1. Allegheny National Forest hemlock stand survey information, May 21 to June 10, 2004.

| STAND | COMPARTMENT | DISTRICT | ACCESS | HWA* | LOCATION |
|-------|-------------|-------------|--------|------------|-----------------------------------|
| 2 | 605 | Marienville | Yes | None Found | SR62 |
| 1 | 610 | Marienville | Yes | None Found | SR666 |
| 15 | 610 | Marienville | Yes | None Found | SR666 |
| 6 | 614 | Marienville | Yes | None Found | SR666 |
| 37 | 644 | Marienville | Yes | None Found | Snowmobile Connector# 9 |
| 17 | 652 | Marienville | Yes | None Found | Snowmobile Connector#9 |
| 28 | 681 | Marienville | Yes | None Found | Snowmobile Connector#14 |
| 33 | 681 | Marienville | Yes | None Found | Kelly Pines Campground |
| 20 | 685 | Marienville | Yes | None Found | Mville Connector |
| 3 | 686 | Marienville | Yes | None Found | SR1003 |
| 22 | 686 | Marienville | Yes | None Found | Mville Connector |
| 24 | 686 | Marienville | Yes | None Found | Mville Connector |
| 26 | 686 | Marienville | Yes | None Found | Mville Connector |
| 33 | 686 | Marienville | Yes | None Found | Mville Connector |
| 15 | 697 | Marienville | Yes | None Found | Snowmobile Connector#14 |
| 42 | 820 | Marienville | Yes | None Found | SR6a |
| 51 | 820 | Marienville | Yes | None Found | SR6a |
| 27 | 824 | Marienville | Yes | None Found | North Country Scenic Trail |
| 20 | 832 | Marienville | Yes | None Found | Twin Lakes |
| 23 | 832 | Marienville | Yes | None Found | Twin Lakes |
| 32 | 845 | Marienville | Yes | None Found | SR948s |
| 22 | 846 | Marienville | Yes | None Found | SR948s |
| 8 | 849 | Marienville | Yes | None Found | Twin Lakes Hiking/SR66 |
| 14 | 879 | Marienville | Yes | None Found | Timberline ATV |
| 34 | 889 | Marienville | Yes | None Found | Timberline ATV |
| 36 | 889 | Marienville | Yes | None Found | Timberline ATV |
| 85 | 906 | Marienville | Yes | None Found | SR3002 |
| 48 | 907 | Marienville | Yes | None Found | ESP307 |
| 69 | 908 | Marienville | Yes | None Found | ESP307 |
| 59 | 909 | Marienville | Yes | None Found | Laurel Mill |
| 1 | 669 | Marienville | Yes | None Found | Lolita Campground |
| 2 | 206 | Bradford | Yes | None Found | Rocky Gap ATV |
| 3 | 206 | Bradford | Yes | None Found | Rocky Gap ATV |
| 11 | 209 | Bradford | Yes | None Found | Allegheny Snowmobile Trail at SR6 |
| 16 | 209 | Bradford | Yes | None Found | Allegheny Snowmobile Trail at SR6 |
| 31 | 209 | Bradford | Yes | None Found | Allegheny Snowmobile Trail at SR6 |
| 43 | 209 | Bradford | Yes | None Found | Allegheny Snowmobile Trail at SR6 |
| 44 | 209 | Bradford | Yes | None Found | Allegheny Snowmobile Trail at SR6 |
| 46 | 209 | Bradford | Yes | None Found | Allegheny Snowmobile Trail at SR6 |
| 1 | 222 | Bradford | Yes | None Found | SR3005 |
| 13 | 223 | Bradford | Yes | None Found | Buchers Mills |
| 18 | 224 | Bradford | Yes | None Found | Buchers Mills |
| 36 | 229 | Bradford | Yes | None Found | Buchers Mills |
| 47 | 230 | Bradford | yes | None Found | SR2006 |
| 44 | 231 | Bradford | Yes | None Found | SR2006 |
| 25 | 256 | Bradford | Yes | None Found | Fish Hatchery |
| 2 | 278 | Bradford | Yes | None Found | Hearts Content |
| 18 | 278 | Bradford | Yes | None Found | Hearts Content |
| 20 | 281 | Bradford | Yes | None Found | SR82 |

| | | | | | |
|----|-----|----------|-----|------------|-------------------------------------|
| 11 | 290 | Bradford | Yes | None Found | Dunham Siding |
| 23 | 301 | Bradford | Yes | None Found | Barnes |
| 14 | 302 | Bradford | Yes | None Found | Henry's Mills |
| 27 | 302 | Bradford | Yes | None Found | Henry's Mills |
| 1 | 307 | Bradford | Yes | None Found | Twin Lakes Hiking/NCST |
| 19 | 310 | Bradford | Yes | None Found | SR948n |
| 32 | 310 | Bradford | Yes | None Found | SR948n |
| 1 | 327 | Bradford | Yes | None Found | Hickory Creek Wilderness |
| 2 | 327 | Bradford | Yes | None Found | Hickory Creek Wilderness |
| 3 | 327 | Bradford | Yes | None Found | Hickory Creek Wilderness |
| 11 | 327 | Bradford | Yes | None Found | Hickory Creek Wilderness |
| 13 | 327 | Bradford | Yes | None Found | Hickory Creek Wilderness |
| 22 | 327 | Bradford | Yes | None Found | Hickory Creek Wilderness |
| 23 | 327 | Bradford | Yes | None Found | Hickory Creek Wilderness |
| 39 | 327 | Bradford | Yes | None Found | Hickory Creek Wilderness |
| 40 | 327 | Bradford | Yes | None Found | Hickory Creek Wilderness |
| 41 | 327 | Bradford | Yes | None Found | Hickory Creek Wilderness |
| 44 | 327 | Bradford | Yes | None Found | Hickory Creek Wilderness |
| 52 | 327 | Bradford | Yes | None Found | Hickory Creek Wilderness |
| 1 | 334 | Bradford | Yes | None Found | Hickory Creek Wilderness |
| 7 | 349 | Bradford | Yes | None Found | SR666 |
| 1 | 350 | Bradford | Yes | None Found | SR666 |
| 2 | 353 | Bradford | Yes | None Found | North Country National Scenic Trail |
| 11 | 353 | Bradford | Yes | None Found | North Country National Scenic Trail |
| 12 | 353 | Bradford | Yes | None Found | North Country National Scenic Trail |
| 30 | 354 | Bradford | Yes | None Found | North Country National Scenic Trail |
| 21 | 426 | Bradford | Yes | None Found | SR346 |
| 8 | 431 | Bradford | Yes | None Found | SR321n |
| 38 | 438 | Bradford | Yes | None Found | Allegheny Snowmobile Trail2 |
| 23 | 440 | Bradford | Yes | None Found | Allegheny Snowmobile Trail1 |
| 45 | 440 | Bradford | Yes | None Found | Allegheny Snowmobile Trail1 |
| 12 | 444 | Bradford | Yes | None Found | SR321n |
| 40 | 444 | Bradford | Yes | None Found | SR321n |
| 3 | 445 | Bradford | Yes | None Found | SR321n |
| 63 | 454 | Bradford | Yes | None Found | SR321 |
| 26 | 461 | Bradford | Yes | None Found | Westline |
| 51 | 476 | Bradford | Yes | None Found | Longhouse Trail |
| 21 | 478 | Bradford | Yes | None Found | Westline |
| 31 | 490 | Bradford | Yes | None Found | Snowmobile Connector |

*HWA: Hemlock Woolly Adelgid